Gulf of Mexico Harmful Algal Bloom Bulletin

3 February 2005

National Ocean Service

National Environmental Satellite, Data, and Information Service

Last bulletin: January 13, 2005

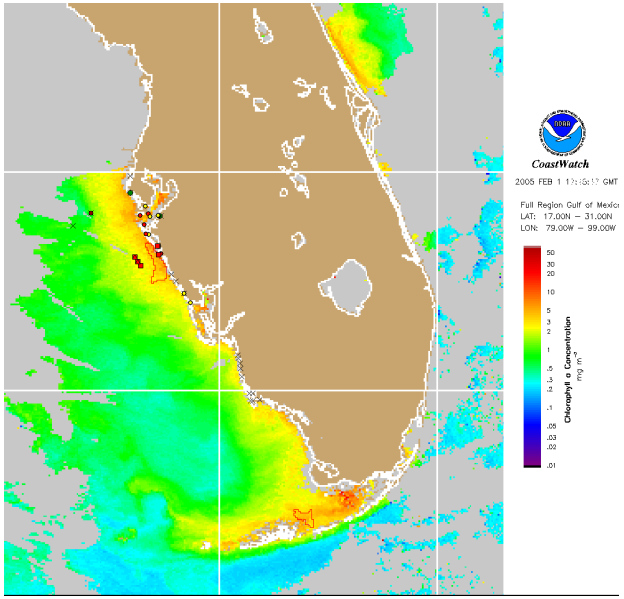
Conditions: A harmful algal bloom has been identified off of southern Pinellas, Manatee and Sarasota Counties. No impacts expected at Pinellas County beaches. High beach impacts in Sarasota county and patchy moderate impacts in southern Manatee County possible tonight only. Low impacts expected in Sarasota County and very low to no impacts in southern Manatee County Friday through Monday.

A harmful algal bloom has also been identified north and south of the lower Keys at Moser Channel. No impacts expected at the shoreline; reports of discolored water possible.

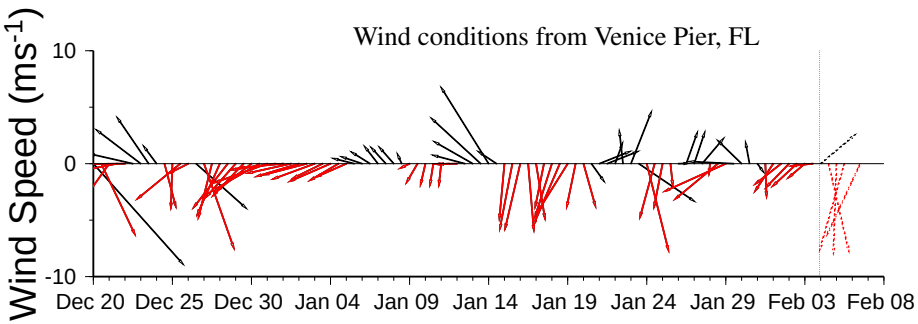
Analysis: A *K. brevis* bloom persists south of Tampa Bay. Sampling by FWRI indicated high concentrations of *K. brevis* at Siesta Key on January 28. As of February 2, the bloom's approximate inshore position extended from Mullet Key south to Englewood with chlorophyll concentrations up to 8.3μg/L at 82°38W, 27°14N. The bloom extends offshore of Boca Grande approximately 23km/14 miles offshore at 82°30W, 26°37N where chlorophyll concentrations are about 2μg/L. Sampling recommended at this location. Chlorophyll levels in the maximum western extent are lower (1-2μg/L) at approximately 83°8W, 26°55N. Strong northerly, northeasterly, and easterly winds should limit impacts at the beach through Monday; however continual southerly movement is likely.

The bloom persisting to the north of the lower Keys has migrated through Moser Channel where very low to low *K. brevis* concentrations were identified on February 1 by Mote Marine Lab. Chlorophyll levels as of February 2 were approximately 5μg/L in this region. Clouds currently obscure extents of this bloom. Further movement through Moser Channel is likely over the weekend with the possibility of intensification on the south side of the lower Keys. No impacts at the shoreline are expected through Monday.

~Fisher, Bronder, Stolz

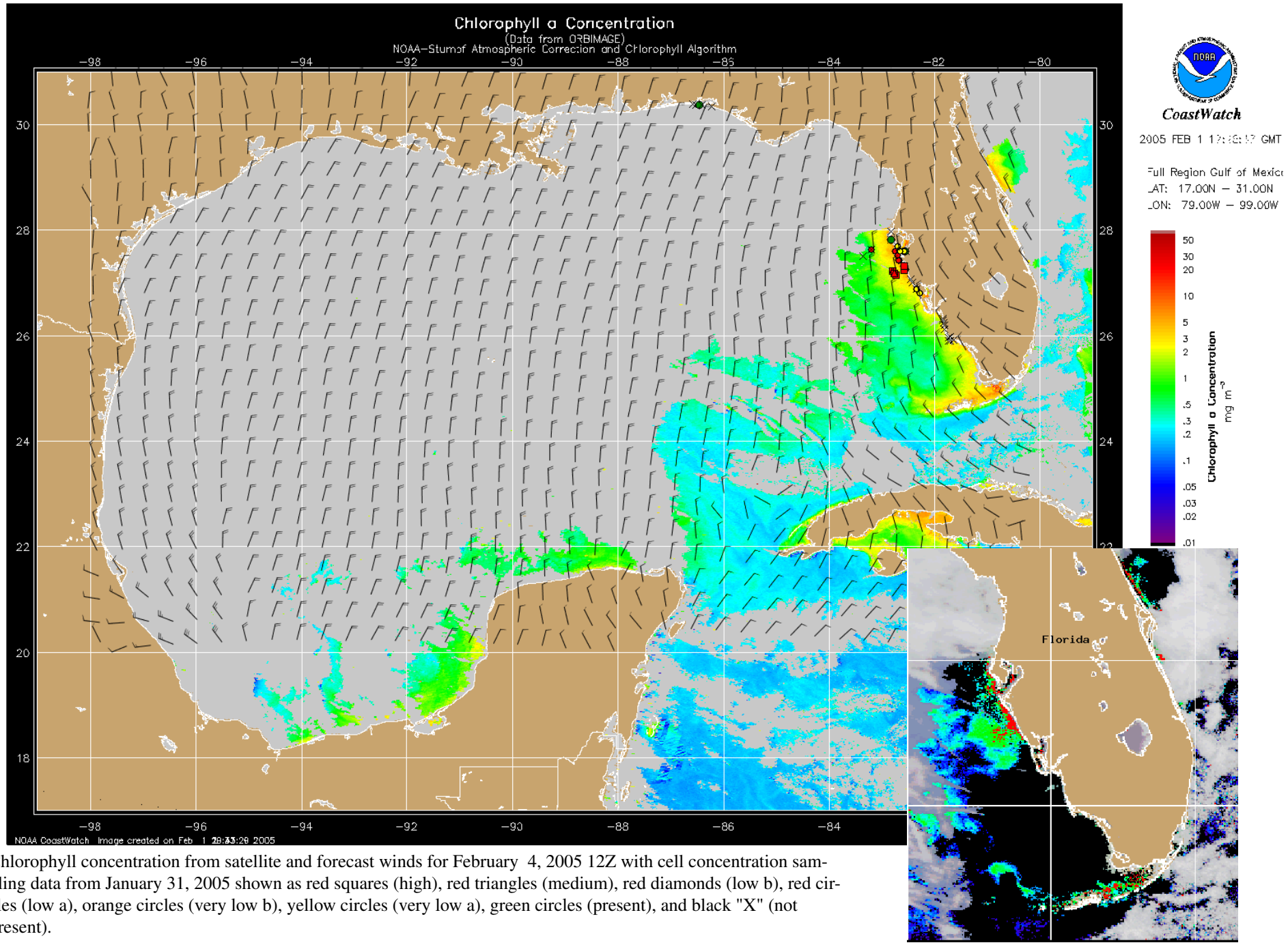


Chlorophyll concentration from satellite with possible HAB areas shown by red polygon(s). Cell concentration sampling data from January 31, 2005 shown as red squares (high), red triangles (medium), red diamonds (low b), red circles (low a), orange circles (very low b), yellow circles (very low a), green circles (present), and black "X" (not present).



Wind speed and direction are averaged over 12 hours from measurements made on buoys. Length of line indicates speed; angle indicates direction. Red indicates that the wind direction favors upwelling near the coast. Values to the left of the dotted vertical line are measured values; values to the right are forecasts.

Tampa Bay to Charlotte Harbor: East winds shifting to southwesterly today and strong (15-20kts; 8-10m/s) northwesterlies tonight. Winds expected to remain strong and begin clocking northerly to northeasterly through Saturday. Milder easterlies (10-15kts; 5-8m/s) forecasted to return Sunday, shifting to southeasterly Monday. Keys: Variable winds becoming northwesterly and increasing in strength to 20kts (10m/s) on Friday. Strong northerlies expected Friday night into Saturday, then shifting northeasterly and weakening to 10-15kts through Monday.



Chlorophyll concentration from satellite and forecast winds for February 4, 2005 12Z with cell concentration sampling data from January 31, 2005 shown as red squares (high), red triangles (medium), red diamonds (low b), red circles (low a), orange circles (very low b), yellow circles (very low a), green circles (present), and black "X" (not present).

Blooms shown in red (see p. 1 analysis and image for interpretation)

Wind conditions from Sand Key, FL